

TITLE: An ayurvedic nutritinal preparation.

FIELD OF INVENTION: The invention relates to an ayurvedic nutritinal preparation, essentially from nuts of the anacardiaceae family, *Allium Sativum* Linn and *Zingiber Officinale* Rosc for use as a prophylatic cardiac tonic, for general revitalization of the human body and for increasing cardiac muscle tonicity.

BACKGROUND OF THE INVENTION: Several ayurvedic preparations are in use for the treatment of heart ailments and as a prophylatic preparation for cardiac care. Most commonly used and reported are extracts or preparations from the plant *Terminalia arjuna*. Patent Application No: 1184/MUM/2001 describes a process for an ayurvedic preparation from *Terminalia arjuna* bark, *Acorus calmus* stem, *Magnifera indica* bark, *Moringe oelifera* bark, *Murraya koengil* leaf, *Pipeer longum* fruit, *Boerhaavia diffusa* root. The presently known ayurvedic preparations are very selectively effective.

The present invention describes for the first time a formulation for a complete ayurvedic preparation, made essentially from nuts of plants belonging to the genus anacardiaceae, for revitalising the human body. The preparation enhances the tonicity of the heart muscles, increases the production of blood by the marrow, reduces occlusion of arteries, improves myocardial blood flow and prevents cardiac ailments.

Nuts from the anacardiaceae family contain toxins and irritants, and cause contact dermatitis, because of which rash and irritation occurs. Hence its nutritinal value has been explored only in a limited way for cancer, gastric infections and fungal infections but not in respect of cardiovascular treatment. The invention also describes for the first time the use of nuts of the anacardiaceae family from which the toxic irritants are removed, and is combined with the extract of *Allium Sativum* Linn and *Zingiber Officinale* Rosc for treatment of cardiac ailments.

SUMMARY: In its main aspect the invention consists of an ayurvedic nutraceutical preparation for use as a prophylactic for cardiac ailments and for increasing cardiac muscle tonicity. The principal ingredient used is a nut oil extract prepared from clean and dried nuts from plants of the genus *anacardiaceae*, and an extract of *Allium Sativum* Linn and *Zingiber Officinale* Rosc in vegetable oil. To obtain a nut oil extract, the nuts are cleaned and dried and the toxins and irritants contained in the nuts, are removed or deactivated by repeated cooking and drying of the nuts in milk to obtain pure detoxified nuts. The oil in the nuts which is the essential ingredient for this invention, is extracted by boiling the detoxified nuts in a medium of clarified butter, preferably obtained from cow's milk, until all the moisture is removed. In another aspect of this invention, 5 proportions by weight of ghee is used for every 2 proportions by weight of nuts. The medium is maintained at a temperature of 50° to 80°, for an extended period of time until the medium is absolutely moisture free. An extract of *Allium Sativum* Linn and *Zingiber Officinale* Rosc is obtained by cooking the two in a moisture free vegetable oil.. The nut oil extract and the *Allium Sativum* Linn and *Zingiber Officinale* Rosc extract are filtered separately and mixed together.

In another aspect of this invention, the nuts used are either of the species *Semecarpous Anacardium* Linn or *Anacardium Occidenatale* Linn.

In a further aspect of this invention *Zingiber Officinale* Rosc and *Allium Sativum* Linn are used in a proportion of 1:2 by weight in vegetable oil of 3 proportions by weight, and mixed with filtered nut oil extract obtained from 2 proportions by weight of nuts.

In yet another aspect of this invention the vegetable oil used is purified oil from *Ricinus Communis* Linn.

In a final aspect of this invention, the ayurvedic nutraceutical preparation as described above is made available in soft gelatin capsules.

DESCRIPTION: The following description of the formulation is the best known method of working this invention.

In its main embodiment the invention consists of a nutricional preparation for use as a prophylactic
5 for cardiac elements and for increasing cardiac muscle tonicity.

It comprises essentially of

- i) a nut oil extract in clarified butter. The nut oil extract is obtained from clean, dried and processed nuts from the plants of the genus anacardiaceae.
- 10 ii) An extract of *Allium Sativum* Linn and *Zingiber Officinale* Rose, which is prepared in moisture free vegetable oil

The nuts of the anacardiaceae family are cleaned and dried. Subsequently they are cooked in milk and dried. The process is repeated several times to obtain pure detoxified nuts from which the
15 irritants and toxins have been removed or deactivated. Nuts preferably used are from the plants of *Semecarpous Anacardium* Linn or *Anacardium Occidenatale* Linn. The detoxified nuts are boiled in a medium of clarified butter (ghee), until all the moisture is removed and the spluttering of the medium ebbs. Clarified butter made from cow's milk is preferred. For every 2 proportion by weight of nuts, 5 proportion by weight of ghee is used. The medium is maintained at a temperature
20 of 50° to 80° for an extended period of time to ensure removal of any remainder moisture. By the aforesaid process the essential oil from the nut is extracted in to the medium. By a separate process, *Zingiber Officinale* Rose and *Allium Sativum* Linn in a proportion of 1:2 by weight is cooked in purified moisture free vegetable oil, preferably oil from *Ricinus Communis* Linn, to obtain a *Zingiber Officinale* Rose - *Allium Sativum* Linn extract. The *Zingiber Officinale* Rose - *Allium*
25 *Sativum* Linn extract and the nut oil extract are separately filtered to remove all solid particles and mixed together.

In the preferred embodiment of this invention, 1:2 proportion by weight of *Zingiber Officinale* Rose and *Allium Sativum* Linn are cooked in 3 proportions by weight of vegetable oil, . The filtered
30 extract of *Zingiber Officinale* Rose and *Allium Sativum* Linn so obtained is mixed with filtered nut oil extract obtained from 2 proportions by weight of nuts.

The viscous liquid is ready for use in doses proportional to age and body weight of the consumer.
The viscous liquid may also be encapsulated in soft gelatin capsules for dispensing.

5 The following are examples of some in vivo clinical trials conducted, on the basis of oral administration of said ayurvedic nutraceutical preparation:

Comparative Study of I.H.D (Ischemic Heart Disease) Patient Before and After Administration of CF1 Based on Symptoms and 2D Echo / Color Doppler

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No	diagnosis	Symptoms pretreatment	Report of pretreatment 2D Echo	Period of treatment With CF1	Symptoms Post treatment	Report of post treatment 2D Echo	Remarks
001	I.H.D.	-Breathlessness on mild effort -Severe chest pain on walking -Giddiness	-Severe global hypokinesia -Severe LV ^{vi} dysfunction -Severe PAH ^{vi} -LVEF ^{vi} 15-20%	1-0 X 90	-NIL -Can walk comfortably 2-3 kms.	-Global hypokinesia reduced -Moderate LV ^{vi} dysfunction -Mild PAH ^{vi} -LVEF ^{vi} 34%	-Overall good improvement
003	I.H.D.	-Angina on mild effort -breathlessness on effort -unable to climb stairs	-Distal IVS ^{vi} , apex and anterior wall hypokinetic -Trivial MR ^{vi} , TR ^{vi} and PR ^{vi} -LVEF ^{vi} 50%	1-0 X 60	-Angina reduced -Breathlessness reduced to marked extent	-No regional wall motion abnormality at rest -Normal atrio-ventricular and semilunar valves -LVEF ^{vi} 60% Normal LV ^{vi} systolic function	-Overall good improvement -Maintained good health

No	diagnosis	Symptoms pretreatment	Report of pretreatment 2D Echo	Period of treatment With CF1	Symptoms Post treatment	Report of post treatment 2D Echo	Remarks
006	I.H.D.	-general debility -Chest pain and breathlessness on effort	- -Distal IVS ^x & LV ^m is akinetic -LVEF ^{iv} - 30% -Evidence of organised clot at LV ^m Apex -LV ^m diastolic dysfunction	2-0 X 105	-Breathlessness reduced -chest pain occassional -improved appetite -general feeling of well being .	-LVEF -35% -Distal IVS ^x & LV ^m hypokinetic -No evidence of clot in LA ^x or LV ^m -Normal LV ^m diastolic function	-Overall good improvement -Maintained good health
011	I.H.D.	-Chest discomfort -Pain in left arm -Weakness	-Ischemic heart disease -Hypokinetic inferior and apical segments -LVEF ^{iv} 45%	2-0 X 120	-Chest discomfort reduced pain in the left arm disappeared -feeling of well being	-Normal sized LV -Normal systolic & diastolic function -LVEF ^{iv} 78% No mitral valve prolapse -No segmental wall motion anomaly	-overall good recovery
012	I.H.D.	-Breathlessness -Chest pain on effort -Heart burn frequently	-Ischemic heart disease -LVEF ^{iv} 39%	2-0 X 90	-No breathlessness -No chest pain -No heart burn – working 8-10 hrs a day	-Normal LV function -LVEF ^{iv} 55%	-Overall good recovery

- i. I.H.D – Ischemic Heart Disease
ii. LV – Left Ventricle
iii. LVEF – Left Ventricle Hypertrophy
iv. M.R.- Mitral Regurgitation
v. T.R.- Tricuspid Regurgitation

- vi. P.R.- Pulmonary Regurgitation
vii. P.A.H.- Pulmonary Artery Hypertrophy
viii. L.A.- Left Auricle
ix. I.V.S.- Inter Ventricular Septum